## Abbreviations/Acronyms

2.5-D	two and a half dimensional	C	
3-D 3G	three dimensional	CCIR	International Radio Consultative Committee (now ITU-R)
30	third generation	CD	compact disk
A		CDA	code domain analyzer
AFIWC/EWS Air Force Information Warfare		CDMA	code division multiple access
AFIWC/EW	Center/Electronic Warfare Squadron	CIP	critical infrastructure protection
AGILE	Advanced Generation of Interoperability for Law Enforcement	CMTS	cable modem termination system
		CONUS	continental U.S.
AMPS	advanced mobile phone service	COTS	commercial off-the-shelf
ANS ANSI	American National Standard American National Standards Institute	CRADA	cooperative research and development agreement
APCO	Association of Public Safety	CRPL	Central Radio Propagation Laboratory
	Communications Officials	CRSMS	Compact RSMS
APD	amplitude probability distribution	CSPT	Communication System Planning Tool
ASCII	American Standard Code for Information Interchange	CW	continuous wave
ATB	antenna testbed		
ATIS	Alliance for Telecommunications	D	
	Industry Solutions	dB	decibel
ATM	asynchronous transfer mode	DC	direct current
		DFS	dynamic frequency sharing
В		DGPS	differential GPS
BAWT	broadband arbitrary waveform transmitter	Diff-Serv	Differentiated Services
BER	bit error ratio	DLL	dynamic link library
BLAST	Bell Labs Layered Space-Time theory	DOC	Department of Commerce
BPSK	binary phase shift keying	DOD	Department of Defense
BW		DOJ	Department of Justice
	bandwidth  bandwidth correction factor	DSCP	digital sampling channel probe
BWCF		DSP	digital signal processing
		DSSS	direct sequency spread spectrum
		DTAO	Defense Technology Analysis Office
		DTV	digital television

EIA Electrical Industries Association GPS Global Positioning System  EMC electromagnetic compatibility GSM Global System for Mobile  ESSA Environmental Science Services Administration H  ETS Emergency Telecommunication Service HAAT height above average terrain HDTV high definition television  HF high frequency				
ESSA Environmental Science Services Administration  H  ETS Emergency Telecommunication Service  HAAT height above average terrain HDTV high definition television  HE high frequency	EMC	Electrical Industries Association	GPS	Global Positioning System
Administration  ETS Emergency Telecommunication Service  HAAT height above average terrain  HDTV high definition television  HE high frequency		electromagnetic compatibility	GSM	Global System for Mobile
ETS Emergency Telecommunication Service HAAT height above average terrain HDTV high definition television HE high frequency	ESSA		н	
HDTV high definition television	ETS	• •		height above average terrain
HE high frequency		Service		
HD Hawlatt Packard	F	<b>T. I.</b> I.		
FAA Federal Aviation Administration				
FCC Federal Communications Commission				
FDTD Innite-difference time domain UTTD hypertoyst transfer protocol				
redefail			11111	hypertext transfer protocor
FED-STD Federal Standard			T	
FHSS frequency hop spread spectrum	FHSS		_	Internat?
FM frequency modulation	FM	frequency modulation		
FPGA field programmable gate array ID identification	FPGA	field programmable gate array		
FR&O first report and order IEEE Institute of Electrical and Electronics Engineers	FR&O	first report and order	IEEE	
FRA Federal Railroad Administration  IETF Internet Engineering Task Force	FRA	Federal Railroad Administration	IETF	
FTP file transfer protocol  IF intermediate frequency	FTP	file transfer protocol	IF	
FTTA Federal Technology Transfer Act  IITRI Illinois Institute of Technology (IIT)	FTTA	Federal Technology Transfer Act	IITRI	• •
FY fiscal year Research Institute	FY	fiscal year		
IMT-2000 International Mobile Telecommunications 2000	G		IMT-2000	
GB gigabyte INFOSEC information system security		gigabyte	INFOSEC	information system security
GETS Government Emergency Internet 2 2nd-generation Internet			Internet2	2nd-generation Internet
Telecommunications Service IP Internet protocol	OLIS		IP	Internet protocol
GHz gigahertz IRL Interoperability Research Laboratory	GHz	gigahertz	IRL	Interoperability Research Laboratory
	GIF	graphics interchange format	ISART	International Symposium on Advanced
GIS geographic information system Radio Technologies	GIS	geographic information system		<u> </u>
Global Global Justice Information Network ISDN integrated services digital network	Global			
		Advisory Committee		
GLOBE global land one-km base elevation ISO International Organization for Standardization			ISO	
GO geometric optics  ISSI inter-RF subsystem interface	GO	geometric optics	ISSI	
GPR ground penetrating radar	GPR	ground penetrating radar	1551	mer in subsystem interface

IT	information technology	MOS	mean opinion score
ITCS	incremental train control system	MP	milepost
ITM	Irregular Terrain Model	MPEG	Motion Picture Experts Group
ITS	Institute for Telecommunication Sciences	MSTV	Association for Maximum Service Television, Inc.
ITSA	Institute for Telecommunication	MTA	media terminal adaptor
XCCX X	Sciences and Aeronomy	MW	megawatt
ITU	International Telecommunication Union		
ITU-R	International Telecommunication	N	
ITU-T	Union — Radiocommunication Sector International Telecommunication	NASTD	National Association of State Telecommunications Directors
	Union — Telecommunication	NBS	National Bureau of Standards
IXC	Standardization Sector interexchange carrier	NCAR	National Center for Atmospheric Research
		NCS	National Communications System
K		NGI	next generation Internet
kbps	kilobits per second	NGN	next generation network
kHz	kilohertz	NII	National Information Infrastructure
		NIJ	National Institute of Justice
L LAN	local area network	NIST	National Institute of Standards and Technology
LMDS	local multipoint distribution service	NLANR	National Laboratory for Applied Network Research
LMR	land mobile radio	NOAA	National Oceanic and Atmospheric
LOS	line of sight		Administration
		NPRM	notice of proposed rulemaking
M		NS/EP	National Security and Emergency Preparedness
MAN	metropolitan area network	NTIA	National Telecommunications and
Mbps	megabits per second		Information Administration
MHz	megahertz	NWS	National Weather Service
MILCOM	Military Communications Conference		
MIMO	multiple input multiple output		

0		Q	
O&M	operations and maintenance	QoS	quality of service
OATS	open area test site	QPSK	quadrature phase-shift keying
OLES	Office of Law Enforcement Standards		
OMB	Office of Management and Budget	R	
OO	object oriented	R&D	research and development
ORTA	Office of Research and Technology	RCG	Radar Correspondence Group
	Applications	RDBMS	relational database management system
OSM	Office of Spectrum Management	RF	radio frequency
OT OTAR	Office of Telecommunications over-the-air rekeying	RFIMS	Radio Frequency Interference Monitoring System
OTP	Office of Telecommunications Policy	RMON	remote monitoring
		RMS	root mean square
P		RSEC	Radar Spectrum Engineering Criteria
P25	Project 25	RSMS	Radio Spectrum Measurement System
PAS	priority access service	RTCP	realtime transport control protocol
PBS	Public Broadcasting System	RTP	realtime transport protocol
PBX	private branch exchange		
PC	personal computer	S	
PCS	Personal Communications Services	S-T	spatial-temporal
PDA	personal digital assistant	SBC	single board computer
PDO	Program Development Office	SDMA	space division multiple access
PESQ	perceptual evaluation of speech quality	SDR	software defined radio
PN	pseudo-random	SDTS	spatial data transfer standard
PRR	pulse repetition rate	SFG	Standards Formulating Group
PS/LE	public safety/law enforcement	SG	study group
PSNR	peak signal-to-noise ratio	SIP	session initiation protocol
PSTN PSWN	public switched telephone network  Public Safety Wireless Network	SIPRNET	Secret Internet Protocol Routable Network
15 111	Tuble Surety Wheless Network	SLA	service level agreement
		SNR	signal-to-noise ratio
		SONET	synchronous optical network
		SRD	standard requirements document
		SSCQE	single stimulus continuous quality evaluation

T		V	
TA Services	Telecommunications Analysis Services	V	volt
TB	terabyte	VAC	volts, alternating current
TDMA	time division multiple access	VHF	very high frequency
TIA	Telecommunications Industry	VoIP	voice over Internet protocol
	Association	VPN	virtual private network
TIREM	Terrain Integrated Rough Earth Model	VQEG	Video Quality Experts Group
TR	technical report	VQM	video quality measurement
TSB	Telecommunications Systems Bulletin		
TV	television	W	
TVRO	television receive-only	W-CDMA	wideband CDMA
		WCTF	Wireless Communications Task Force
U		WDM	wave division multiplexing
UHF	ultra high frequency	Wi-Fi	wireless fidelity
UMTS	universal mobile telecommunications system	WIN	wireless intelligent network
UNIX	uniplexed information and computing service	WLAN	wireless LAN
		WNRC	Wireless Networks Research Center
URL	uniform resource locator	WP	working party
URSI	International Union of Radio Science	WPAN	wireless personal area network
USCG	U.S. Coast Guard		
USGS	U.S. Geological Survey	X	
UTRA	UMTS terrestrial radio access	XML	eXtensible Markup Language
UWB	ultrawideband		